

Table S2. Best-fitting parameters in the PROBE model across subjects' groups used in Figs. 6 & 7. Mean(SEM) across subjects. See **Materials and Methods** for detailed parameter description. Boxes indicate significant differences across groups (see text).

Subjects' groups	inv. temp. β	noise ϵ	bound N	learning rate α_s	learning rate α_c	Recoll. entropy η	context-sensit. Bias δ	confirmation bias θ
Exploiting vs. exploring Ss*								
Exploiting Ss	25(2)	.04(.01)	3.3(.3)	.24(.02)	n/a	.82(.02)	n/a	.57(.06)
Exploring Ss	29(2)	.05(.01)	3.0(.3)	.27(.04)	n/a	.77(.06)	n/a	1.03(.08)
Cont.- vs. Out.- exploit. Ss**								
Context-exploit. Ss	21(2)	.03(.004)	3.5(.5)	.19(.03)	.01(.003)	.77(.03)	.71(.04)	.61(.09)
Outcome-exploit. Ss	21(3)	.06(.01)	3.5(.4)	.18(.03)	.004(.002)	.86(.02)	.47(.05)	.55(.08)

*: subjects from both experiments.

** : subjects from experiment 2.

n/a: contextual parameters α_c and δ cannot be estimated in Experiment 1.